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The Importance of Ethical of Artifical Intelligence (AI) in Inslusive Education

Anita Intan Rohmatuszahroh[1], Kiki Ayu Hermawati[2]
Hanny Rizqiyana Nur'aliya[3], Siti Khalimah[4]
Universitas Islam Negeri Sunan Kalijaga, Sleman, Daerah Istimewa Yogyakarta, Indonesia[1, 2, 3, 4]
anitazahroh1@gmail.com[1], khikiyayu@gmail.com[2]
hannyrizqiyana.95@gmail.com[3] khalimahs366@gmail.com[4]

Abstract: Artificial Intelligence (AI) has given new hopes and changed the elements of education for the better, especially in inclusive education. AI is very concerned with equality, which is expected to help children with special needs get their rights and a more appropriate education. However, the presence of AI has also brought many negative impacts due to the lack of understanding of the ethical principles that must be implemented. This paper was compiled to explore The Importance of Ethical of Artificial Intelligence (AI) in Inclusive Education. The results of this study show that until now there have been many public, private, and government organizations in various countries around the world that have created multiple guidelines to regulate, guide, and protect all elements involved and affected by the progress of AI. Among them are charter agreements and various guidelines related to ethical principles, basic rights, fundamental values, and other instruments that have been studied and compiled in detail and very systematically. But the conditions that have occurred until now are far from perfect. AI still presents many problems, concerns, and forms of unavoidable abuses, especially in inclusive education.
Keywords: Ethics, Policy, Artificial Intelligence, Equality, Inclusive Education.

Pentingnya Etis Kecerdasan Buatan (AI) dalam Pendidikan Inklusif

Abstrak: *Kecerdasan Buatan (AI) telah memberikan harapan baru dan mengubah unsur pendidikan menjadi lebih baik, khususnya dalam pendidikan inklusif. AI sangat memperhatikan konsep kesetaraan, yang diharapkan dapat membantu anak berkebutuhan khusus untuk mendapatkan hak-haknya sehingga mereka memperoleh pendidikan yang lebih tepat. Namun, di sisi lain, kehadiran AI juga membawa banyak dampak negatif akibat kurangnya pemahaman terhadap prinsip-prinsip etika yang harus dilaksanakan. Tulisan ini disusun dengan tujuan untuk mengeksplorasi berbagai kesepakatan terkait prinsip-prinsip etika dan nilai-nilai AI dalam dunia pendidikan inklusif. Hasil penelitian ini menunjukkan bahwa hingga saat ini telah banyak organisasi publik, swasta, dan pemerintah di berbagai negara di seluruh dunia yang telah membuat berbagai pedoman untuk mengatur, membimbing, dan melindungi semua elemen yang terlibat dan terpengaruh oleh kemajuan AI. Di antaranya adalah perjanjian piagam dan pedoman terkait prinsip-prinsip etika, hak-hak dasar, nilai-nilai fundamental, dan instrumen lainnya yang telah dipelajari dan disusun secara rinci dan sangat sistematis. Namun pada kenyataannya, kondisi yang terjadi hingga saat ini masih jauh dari kata sempurna. AI masih menghadirkan banyak masalah, kekhawatiran, dan berbagai bentuk penyalahgunaan yang tidak dapat dihindari, terutama dalam pendidikan inklusif.*
Kata Kunci: *Etika, Kebijakan, Kecerdasan Buatan, Kesetaraan, Pendidikan Inklusif.*

1. Introduction

The value of Artificial Intelligence (AI) in education has been recognized for the past few years (B. Y. Hu et al., 2018). An AI research group in education specifically discusses the relationship between AI and inclusive education. However, in fact, in the implementation of inclusive education in schools, there are still various difficulties and a number of issues that can cause problems throughout the learning process for children with special needs (He, 2023). The progress of Artificial Intelligence has not been able to provide maximum contribution to help them. This is because the conditions of the elements of inclusive education organizers who still do not fully understand the existence of standard guidelines or guides regarding ethical principles, basic rights, fundamental values, and other instruments in utilizing the Progress of Artificial Intelligence (X. Hu, 2023).

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The existence of inclusive education has indeed caused an endless debate, especially when associated with the presence of Artificial Intelligence. Several parties, both pro and con, have their own considerations regarding the implementation of inclusive education and Artificial Intelligence, which seems to only be carried out as best they can. Those who support it believe that the advancement of Artificial Intelligence developed in inclusive education, it will help children with special needs to be educated together with other children to optimize their potential so that they will have various skills that will be useful in society, nation and state more effectively and more optimally (Alqahtani, 2023). Therefore, it is very important to understand and know more deeply about ethical principles, basic rights, fundamental values, and other instruments in utilizing Artificial Intelligence Advances to improve and maximize inclusive education so that all children can get a more meaningful and meaningful education (Xu, 2022). The use of Artificial Intelligence in collaboration with an understanding of ethical values will support more deeply to produce effective learning through various subjects, contexts, and times (Kim et al., 2022).

The European Commission has established a strategic objective to enhance both public and private investment in artificial intelligence (AI) with the aim of promoting its adoption, anticipating associated socio-economic and educational transformations, and establishing a suitable ethical and legal framework to reinforce the principles and benefits of AI. There are three pillars of ethical values that should be actively pursued and discussed regarding the use and impact of AI systems that will support the evaluation of outcomes and approaches, and can especially help in complex cases in the provision of inclusive education (Kerzel, 2021).

This research was conducted with the aim of providing a deeper contribution to help improve the guidelines on the components of strong and appropriate AI ethical values, especially in the provision of inclusive education. In addition, it is hoped that the results of this research can be directed to all stakeholders and all elements involved in the provision of inclusive education so that these ethical values guidelines can This study aims to extend the existing body of moral principles guidelines by offering practical assistance on the operationalization of these concepts, with a particular emphasis on sustaining the values of equality to make education for all a success through the advancement of Artificial Intelligence (AI) (Alhwaiti, 2023).

The ethical foundations that underpin the creation, implementation, and utilization of AI systems encompass several key principles, namely the preservation of human autonomy, the prevention of harm, the pursuit of justice, and the provision of explanations for all children, including those with special needs. Hence, it is imperative to conduct this research with a particular focus on circumstances that involve marginalized populations, such as children and those with disabilities, in order to facilitate inclusive education (Maphosa, 2023) effectively. The development of Artificial Intelligence (AI) and Inclusive Education if prepared wisely and comprehensively The implementation of a collaborative interactive environment has the potential to facilitate the development and enhance the quality of life for individuals with special educational needs and their immediate social circles (Gessl et al., 2019). Due to the implicit quality of learning difficulties, the accompanying symptoms, and their extreme similarities, AI evaluation tools can be a way and answer to improve the ability of parents or teachers when evaluating children. They can use advances in Artificial Intelligence to check the child's academic level, and make the right choices by notifying specialists whenever there are difficulties (Abdulazeez, 2018). It is imperative to incorporate AI training interventions into the educational curriculum for children with special educational needs, as these interventions have the potential to effectively balance the child's autonomy with suitable direction and regulation for their future life provisions.

2. Methods

This research employs a qualitative approach, specifically through the utilization of a library survey instrument. This method yields information in the form of memos and descriptive data, derived from a comprehensive analysis of books, national journals, international journals, and other relevant literature pertaining to the fields of Artificial Intelligence and Inclusive Education. The data derived from the literature review is subsequently subjected to descriptive analysis in order to examine the significance of ethical principles pertaining to Artificial Intelligence within the realm of inclusive education. This analysis is based on the information and interconnected relationships found in the literature, with the aim of obtaining comprehensive information that is oriented

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towards the practicality of ensuring successful education for all individuals.

3. Result and Discussion

The advancement of AI has made great achievements in helping and Enabling the dissemination of educational resources in the facilitation of inclusive education for children with special needs and children without special needs, encompassing students in kindergartens, elementary schools, junior high schools, high schools and even to universities that provide inclusive education (Zhang, 2023).

These achievements include not only limited to written language, reading, listening, and mathematics-related learning for students in inclusive schools but also beyond that, namely about the meaning of education itself. The presence of Artificial Intelligence has given new hope for the sweet meaning of education that helps children with special needs to enjoy being with their friends and feel connected to each other from the various sophistication offered. Despite the many challenges, especially in developing countries, Artificial Intelligence (AI) has gradually gained the power to improve learning for children with special needs along with learning with non-special needs children (Edwards & Cheok, 2018).

The positive impacts of implementing artificial intelligence in the field of inclusive education are numerous and very diverse, including: facilitating the tasks of teachers and students in teaching and learning activities, unlimited data storage, making educators' tasks non-repetitive, can be used anytime without space and time limits and facilitating work to be faster and better.

Learning for children with special needs and non-special needs can be supported and facilitated through AI-based tools and environments in the context of schools that provide inclusive education and informal environments. The sophistication of AI has introduced new methods of how AI-based tools and services can support student learning and help them become more engaged, have a higher curiosity, and be in a more positive state of emotional well-being (Du et al., 2023). AI also explains how teachers can be assisted by AI-based tools and environments to diagnose behavioral difficulties of students and the problems experienced by children with special needs while learning and how teachers can see deeper and further what is happening in the classroom.

AI has been a part of human life for years but there are still many things that need to be maximized when associated with the implementation of inclusive education considering that all children have the same right to learn. It is undeniable that the sophistication of AI technology has been responsible for searching image libraries for certain people or locations, suggested responses offered by AI, automatic text on social media, and many other responsibilities that are felt to be beneficial for children with special needs (Lotfi & El Bouhadi, 2022).

This also allows services such as text speech to be more complex, more complete and more perfect for them. The sophistication of AI can also make improvements in understanding different voices that have not been understood by children with special needs (Malida, 2020).

The sophistication of AI in Inclusive Education is very diverse, including in the form of robots, speakers, vehicles and many more. AI has begun to revolutionize human life, including accessibility for individuals with special needs in undergoing a more perfect education. Caring for children with disabilities also requires dedication and a long time (Kerzel, 2021). Nevertheless, due to the enhanced connection and capabilities of artificial intelligence (AI), the provision of AI support has become more viable and does not necessarily necessitate physical contact. The integration of artificial intelligence (AI) in inclusive education encompasses several components such as intelligent tutoring, autonomous agents, natural language processing, knowledge representation, and other related technologies. Choosing the right AI for people with disabilities in implementing inclusive education requires many things to be considered carefully, including: weaknesses that may arise, strengthening participation, whether AI can work well together, is friendly to all users, and has very little risk, especially for children with special needs (K. N. S. Rahayu, 2021). AI is formulated to be able to do everything that human teachers can do, The aforementioned activities encompass content generation, fostering motivation for educational pursuits, addressing complex inquiries, and facilitating social engagements that are crucial for facilitating successful and significant learning (Publikasi et al., 2023).

AI is indeed very useful for children with disabilities, especially in education. These useful things occur in various ways, including increasing mastery of knowledge, skills and ways to hone basic skills that must be possessed. Thus, many educational tools and tools to support learning success, such as pens and pencils, utilize the sophistication of AI technology that can help

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students with special needs and non-disabled students (Kisno et al., 2023).

This is certainly useful for accessing all materials that can make them more competitive and have high spirits in learning both in class and outside the classroom. However, in reality, not all AI tools are friendly and safe to use for children. There are still many problems that are not user-friendly. Therefore, the type of tool to be used must be determined properly and applied in relation to the child's learning needs. Before being used for them, it should have been tested more deeply so as not to endanger anyone, especially in the implementation of education. AI in the implementation of inclusive education includes many things, including: tape recorders, remote controls, smart glasses, magnifying glasses, cognitive hearing aids, Parkinson's disease balancing applications, lock-in syndrome, sign language, and so on (Edwards & Cheok, 2018). However, many of these tools are still not well standardized and perfect to support their learning needs.

In addition to the problems related to the tools offered by AI, it turns out that AI also brings various other negative impacts from the implementation of artificial intelligence (AI) in the field of inclusive education, including: Unpreparedness and lack of understanding of a teacher, so the sophistication of AI actually makes teachers and students lazier and do not fight harder. In addition, AI can also eliminate some of the work of educators, especially in the administrative field of inclusive education. AI cannot understand the goals and information created, but AI works according to what has been programmed so that the meaning of the nobility of inclusive education can be tarnished if various preparations or studies are not carried out in more depth. The sophistication of AI technology in the world of inclusive education also has a high risk in terms of data breaches, especially for children with special needs who are more vulnerable and must be more vigilant. AI is a human creation that will definitely be damaged at some point. If this happens and all parties are not ready, it is not impossible that this will be something that is disturbing and worrying. Therefore, the progress of AI in inclusive education continues to pay attention to various limitations regarding several problems that may be faced by children with special needs or non-disabled children. So that in accessing AI in inclusive education will produce quality education and always relevant, especially in education together with friends around them.

When conducting this research, the researcher has collected various references on guidelines that discuss the principles of AI ethics that have been formulated in various countries in the world. After collecting, reviewing, understanding and analyzing in depth, it can be seen that AI in inclusive education has the following main ethical principles, including:

1. Always based on humanizing humans, the sophistication of AI technology must be centered on humans. In addition, With the goal of enhancing the welfare, freedom, and equality of all people through the implementation of inclusive education, AI must also be founded on a dedication to its use for the common good and the benefit of mankind.

2. Eco-friendly and sustainable AI. Some of the most important issues in education can potentially be solved with the aid of AI systems, but it is important to make sure that this is done in the most environmentally responsible manner possible. An exhaustive evaluation of the system's whole supply chain, including its development, implementation, and use, is required. Choosing decisions with the lowest risk, for instance, and critically analyzing how resources and energy are used during training. Steps that ensure environmental friendliness (AI HLEG, 2019).

3. Reduce and document adverse effects. Ensuring that all children in learning have the capacity to report on activities or decisions that led to specific system results as well as to respond to the fallout from those outcomes is crucial. 4. Communicate in a proactive and straightforward manner. It is imperative that all stakeholders have a comprehensive understanding of the AI system's capabilities and limits. This will enable the setting of reasonable expectations and the implementation of requirements. Be transparent about the facts. Facilitate traceability and auditability of the AI system. Engage all stakeholders Inclusive education throughout the lifecycle of the AI system. Foster training and education so that everyone is well trained (S. M. Rahayu, 2015).

5. Trustworthiness. Depending on the system's general context, trust may or may not be inspired. Consequently, the pursuit of trustworthy AI necessitates a comprehensive rather than focusing solely on the AI system itself.

6. Social impact. Exposure to AI systems must be considered wisely so that they can change our conceptions of social agency. In this situation, artificial intelligence (AI) needs to satisfy three requirements: it needs to be strong (both technologically and socially), ethical (ensuring adherence to moral principles and

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values), and legal in accordance with relevant laws and regulations (Margareth, 2017).

7. Regulations, codes of ethics and certification. Clear regulations must be ensured so that the security of AI products can be accounted for. In this case, regulations must always be reviewed to maximize the use of AI in inclusive education. Organizations and stakeholders can follow these regulations and codes of ethics as internal policies to increase efforts towards perfect AI for education. In addition, certification is also needed to understand how the AI system works and its impact. Consideration must be given to all stakeholders in inclusive education that the AI system is transparent, accountable and fair. This certification will apply standards developed for the domain of AI applications and techniques that are in line with inclusive education standards. Therefore, this must also be equipped with an accountability framework, including disclaimers and review and redress mechanisms.

8. Accountability through governance. A governance framework must be prepared to ensure accountability for the ethical dimension in decision for the appointment of a person responsible for ethical issues related to AI systems and providing oversight and advice.

9. Social dialogue. Therefore it is necessary to have open discussions and engagement between education stakeholders, schools, social partners, stakeholders, parents (guardians) and the general public. (Angreni & Sari, 2020).

10. Orientation towards the Diversity, Equity and Inclusion (DEI) framework. Inclusion and diversity are crucial When developing artificial intelligence systems targeted for real-world applications. The teams responsible for the design, development, testing, maintenance, deployment, and commissioning of AI systems encompass a wide range of users and representative segments of society. Artificial intelligence (AI) systems possess the ability to perform a growing array of tasks autonomously. This practice facilitates the cultivation of objectivity and the inclusion of other perspectives and ideas. Through the utilization of cutting-edge artificial intelligence (AI) technology, the team demonstrates a profound level of diversity encompassing not just gender, culture, and age, but also professional expertise and proficiency in the delivery of inclusive education (Afrita, 2023).

The Role of Artificial Intelligence in Facilitating Inclusive Education for Children with Physical or Sensory Disorders. In order to promote the long-term well-being and independence of students with physical disorders attending inclusive schools with more intricate conditions, it is imperative to provide them with educational programs that cater to their unique needs. Neurologists often assess the majority of sensory and physical problems during the early stages of a child's development. This is why the utilization of artificial intelligence should incorporate the participation of educators and parents in student training, rather than solely relying on diagnostic assessments during the learning process (Fauziyati, 2023)(Suariqi Diantama, 2023).

Artificial Intelligence in Inclusive Education for Children with Specific Language Disorders. Voula C. Georgopoulos, Chrysostomos D. Stylios, and Georgia A. Malandraki (2003) introduced a soft computing model aimed at constructing an intelligent approach for diagnosing Specific Language Disorders. This model utilizes symbols to effectively characterize and describe intricate systems. Therefore, with the help of this AI, specialists will diagnose autism and dyslexia. Four clinical cases have tested this model and demonstrated the success of its application. In addition, Maria Doina Schipor, OA Schipor, and Stefan Gheorghe Pentiuc used fuzzy expert systems to design a Computer-Based Speech Therapy or CBST system to help students with hearing and speech disorders (Zahara et al., 2023).

The application of Artificial Intelligence in inclusive education is demonstrated through the use of speech recognition technology for speech disorders. Advanced voice control and speech recognition technologies have been developed to facilitate standard speaking. Industries and human-computer interfaces have seen significant transformations. Speech recognition systems are being integrated into several domains such as corporate applications, industrial robotics, medical devices, and cars. In the year 2017, a firm headquartered in Tel Aviv emerged with the creation of Voiceitt, an AI-driven speech recognition tool designed to convert complex speech into comprehensible text. The program in question is a hands-free speech recognition tool designed for interactive conversation in real-time. This technology is specifically engineered to be seamlessly included into intelligent speakers, intelligent classrooms, and Assistive and Augmentative Communication devices. This tool proves to be quite beneficial for younger learners who experience speech problems as a result of health conditions, including but not limited to autism, Down syndrome, cerebral palsy, Parkinson's disease, stroke, or traumatic brain injury. Accessibility tools like the OrCam MyEye,

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an AI app designed for individuals with visual needs.

The name of this intelligence-driven device is Aipoly. It employs artificial intelligence to display the individual's immediate environment. Aipoly was introduced to the market in 2015 and garnered significant recognition subsequent to its attainment of the Innovation Award at the 2017 Consumer Technology Association Awards. This concept has garnered significant attention over an extended period due to its straightforward concept rooted in intricate technology. Upon downloading the application onto one's smartphone, users can utilize the application by directing their device towards an object, prompting the app to accurately detect and identify said object (Prayogo et al., 2023). The human system possesses an inherent ability to perceive and classify items through visual, auditory, and other sensory modalities. Although the extent of its exploration remains limited, the primary advantage of this application for individuals is in its ability to facilitate the differentiation of sensations seen as similar. Furthermore, it is possible that the application may not exhibit rapid responsiveness, necessitating a period of waiting for the app to accurately identify and differentiate items. The DynaVox EyeMax System. This state-of-the-art technology has the potential to provide assistance to children who have experienced a stroke, those with cerebral palsy and paralysis, as well as children with restricted or absent fine motor competencies. The device employs an advanced eye-tracking mechanism, enabling users to engage with the interface through an on-screen keyboard, facilitating the input of characters. The text-to-speech technique employed by EyeMax facilitates the translation of these words into audible text. Furthermore, with the on-screen keyboard, the device is equipped with language software known as InterACCt, which offers a wide array of pre-established words and phrases. In order to enhance accessibility for individuals with intellectual disabilities and young children who may have limited comprehension of written language, EyeMax incorporates various visual elements such as lists, photos, and sceneries. Application of Artificial Intelligence in the Treatment of Autism Spectrum Disorder. Autism Spectrum Disorder (ASD) encompasses a broad spectrum of neurodevelopmental diseases. The diagnosis of Autism Spectrum Disorder (ASD) in children is characterized by a range of symptoms, encompassing challenges in language, communication, and social abilities, with the presence of repetitive and limited patterns of behavior, activities, or interests. The ability of children with Autism Spectrum Disorder (ASD) to concentrate on educational materials and engage in social interactions is significantly impaired. Nevertheless, extensive research has demonstrated that AI technologies are effectively assisting individuals in surmounting these obstacles (Suariqi Diantama, 2023).

TecO - AI Robot for ASD. The primary challenges encountered by children diagnosed with Autism Spectrum Disorder (ASD) pertain to the expression of emotions and the maintenance of eye contact. Furthermore, individuals encounter challenges in establishing a connection with others, so posing a significant barrier to effectively addressing their symptoms. In order to tackle these concerns, a team of researchers at Tecnologico de Monterrey in Nuevo Leon, Mexico has developed an artificially intelligent robot named TecO, which mimics the facial and physical characteristics of a cartoon bear. TecO captures the signals sent by the child and subsequently translates the acquired information. The primary objective of the robot is to establish visual awareness and establish eye contact with the youngster, while minimizing any potential escalation of the child's fear levels. The robot exhibits a lack of emotion, remains immobile, and demonstrates predictability, so facilitating a stronger interpersonal connection for children with autism. The TecO actively monitors the child's behavior and employs physical movements or auditory cues as a means to regain their attention in the event of waning interest. The robotic system incorporates an inside camera that captures the frequency of eye contact made by the youngster, while also providing quantitative measurements of the child's developmental progress (Mambu et al., 2023).

According to scholarly investigations, enhancements can be observed during a relatively short span of a few months. If this practice is consistently adhered to, it will enable him to engage in social interactions with peers who do not have special needs. Artificial intelligence designed as Autism Glass. One prevalent obstacle encountered by individuals with autism is to the recognition of social cues. Hence, Catalin Voss, a current graduate student at Stanford University, is constructing a gadget utilizing smart glasses integrated with AI software. The purpose of this technology is to grant children with Autism Spectrum Disorder (ASD) the ability to acquire knowledge about human facial expressions, including those of their family, friends, and others. When an individual

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dons Autism Glass, the artificial intelligence program will analyze the facial expressions of the individual positioned in front of them. Each smart eyewear model is equipped with a head-up display that effectively shows the corresponding feelings beneath the individual's facial region. The wearer can ascertain the emotional states of others by simply perceiving their display of emotions. Students can engage in a subsequent assessment of the recording with their educators or parents in order to assess its effectiveness and facilitate the enhancement of their emotional intelligence. The utilization of Autism Glass facilitates the acquisition of emotional identification skills and the subsequent adaptation of behavior. The primary objective of this tool is to mitigate the prevalent anxiety levels commonly encountered by those with Autism Spectrum Disorder (ASD) during social interactions. Scientific American reports that Voss expressed a desire for forthcoming iterations of AI software to possess sufficient intelligence to comprehend a broader range of indications (Angreni & Sari, 2020).

AI-Powered Apps for ASD. The application incorporates a virtual assistant named Abby, who assists individuals with autism in effectively managing their daily activities in situations where their usual social support network is unavailable. Abby employs artificial intelligence (AI) to monitor the user's behaviors and efficiently manage their academic, professional, and social commitments. Furthermore, the application can function as an initial step in directing individuals' attention towards a more methodical advancement. AI tools provide potentially advantageous outcomes. If the aforementioned tools are enhanced in conjunction with the development of AI-driven tools, they have the potential to effectively mitigate a range of symptoms associated with Autism Spectrum Disorder (ASD) and cater to various educational requirements. The data obtained through the utilization of these artificial intelligence tools during interactions with youngsters will furnish the scientific community with a substantial surplus of relevant data essential for conducting research on autistic behaviors and developmental problems. Wearable AI to Reduce the Challenges of Autism Spectrum Disorder. Artificial intelligence (AI) devices have demonstrated their utility in the domains of disease prediction, data tracking, and health guidance. Numerous inventors are actively seeking to enhance the capabilities of wearable technologies in order to ameliorate the challenges encountered in daily living. The aforementioned findings contribute to the increasing societal recognition of ASD. The primary objective of the gadget is to facilitate the navigation of discussions for youngsters who encounter challenges in speech production. The wearable artificial intelligence can offer immediate assistive support. The research team conducted a study, which yielded findings indicating that the integration of technology for real-time conversation tone identification is highly feasible. It presents potential advantages for individuals experiencing anxiety, symptoms of Autism Spectrum Disorder (ASD), and other related problems. Based on the data acquired from this gadget, it is capable of accurately determining the conversational tone and emotional condition of both the wearer and individuals in their vicinity, achieving an accuracy rate of 83%.

Diversity, non-discriminatory conditions, and the dream of justice are very good and ideal. To achieve maximized AI, we must enable The integration of inclusion and diversity across all stages of the AI system's life cycle is crucial for the successful implementation of inclusive education. In addition to the comprehensive consideration and active engagement of all relevant stakeholders throughout the process, it is imperative to provide equitable access through the inclusive education design process and equitable treatment. The aforementioned criteria exhibits a strong correlation with the fundamental principles of equality and justice (Suryani & Alqadri Bagdawansyah, 2024).

Accessibility and universal design are essential, especially in the implementation of inclusive education. AI systems must be user-centered (for all learners, both those with special needs and those without) and designed so that all children can access AI services in schools (Mambu et al., 2023). This must be done Irrespective of individuals' age, gender, ability, or distinct qualities. The optimization of accessibility to this technology is crucial for individuals with disabilities who are advocating for the efficacy of education within the framework of inclusive education (Adriana, 2021). Study groups at the education level are very important for the growth and development of all children. AI systems should not be unequal, everyone should be able to use them and be able to cover the widest possible range of users, taking into account relevant accessibility to make education for all a success for all children (Angreni & Sari, 2020).

4. Conclusion

The advancement of Artificial Intelligence and Inclusive Education is a noble hope and ideal.

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Therefore, rich standard guidelines are needed on ethical principles to encourage responsible and sustainable AI innovation in schools that provide inclusive education. This must continue to be pursued and used as an ethics and core pillar in developing a unique approach to AI so that it can benefit, empower, and protect individual development and well-being for all children, both those with special needs and non-disabled children. Only by ensuring that children can learn well can AI be trusted and they will fully benefit from the AI system. They will feel confident that there are steps taken to protect their potential risks.

In order to uphold the principles of AI ethics, it is imperative to thoroughly consider seven primary requirements. Following the emergence of Artificial Intelligence as a scholarly field within the realm of inclusive education, numerous transformations have occurred in the technological landscape. Artificial intelligence (AI) technology is widely recognized in the realm of inclusive education for its potential to augment pleasant interaction experiences and establish efficacious learning environments for students. The ethical considerations surrounding the well-being of children in the context of education align closely with the ideals of justice and the mitigation of negative consequences. It is imperative to promote the sustainability and ecological responsibility of AI systems, while concurrently fostering research endeavors aimed at generating AI solutions that effectively tackle diverse challenges within the realm of inclusive education. Ideally, AI systems should be used to benefit all of humanity, including future generations.

The introduction of AI has made great strides in delivering special education needs and its achievements include but are not limited to written language, reading, listening, memory; and arithmetic problems of students with special educational needs. Thus, despite its particular challenges in developing countries, Artificial intelligence (AI) possesses the capability to augment the educational experience for children with special needs, thereby mitigating the obstacles they encounter in obtaining high-quality and pertinent education. Throughout history, technology has been developed with the purpose of assisting individuals with impairments. It is unsurprising that human innovations are designed to cater to individuals with varying talents. Nevertheless, contemporary advancements in the business, including smartphones, 3D printing, and AI systems, are facilitating an enhanced synergy between technical innovation and the requirements of those with impairments. One of the primary obstacles he encounters pertains to the presence of children with special needs, specifically those diagnosed with autism. Nevertheless, the advanced capabilities of artificial intelligence (AI) can serve as a means to enable children with special needs to effectively communicate. One potential solution to address this issue is for Voss to offer children exemplar talks that can serve as valuable learning experiences. Autism spectrum disorders have been found to exhibit a correlation with impaired cognitive ability. Nevertheless, over 40% of children diagnosed with autism exhibit intellectual capacity that is either average or above average. Certain individuals with ASD have exceptional proficiency in mathematics, visual literacy, and music. Hence, it is imperative to ascertain the proficiencies possessed by these youngsters, for the purpose of facilitating their continued development and affording them the chance to lead autonomous lives, thereby ensuring the preservation of the significance of education.

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